REQUEST FOR PROPOSAL
Addendum #1

Department Of Executive Services
Finance and Business Operations Division
Procurement and Contract Services Section
206-684-1681   TTY Relay: 711

King County

Date: **May 24, 2006**

RFP Title:	**Supervisory Process Control System**
Requesting Dept./ Div.:	**Dept. of Natural Resources and Parks Wastewater Treatment Division**
RFP Number:	**05-085 KAH**
Revised Due Date/Time:	**June 29th, 2006 – no later than 2:00 P.M.**
Buyer:	Kathleen Hilliard _Kathleen.hilliard@metrokc.gov_ , 206-263-4274

This addendum is issued to revise the Original Request for Proposal, dated May 4, 2006 as follows:

1. **The proposal due date shall be changed to June 29th, 2006, 2:00 P.M. exactly.**

2. **Part A Request for Proposals**

    a)   1.14 Proposal Content Requirements

    A.   This section is intended as a guideline. All Part C deliverables are listed in the Part C Exhibits. Exhibit C7 Scope of supply, Section 1.1, provides a list of deliverables.

    B.   The County requires 15 copies of the submitted proposals. One submission must be clearly identified by the Contractor as "ORIGINAL". The remaining 14 copies do not need any specific designation.   Five copies of the Pricing Information (Exhibit C8) are required, and shall be submitted in 5 separate sealed envelopes. One sealed envelope and its content must be designated as "ORIGINAL", remaining sealed pricing envelopes must be designated as COPY 1, COPY 2, COPY 3, and COPY 4. Envelopes shall be labeled on the bottom left hand corner.

    b)   1.23 Letter of Intent

    •   Revise the first sentence to delete "with notice of exceptions"

(Continued on next page)

SUBMITTERS SHALL COMPLETE AND SIGN THE FORM BELOW (TYPE OR PRINT)

Company Name		
Address	City/State/Zip Code	
Signature	Authorized Representative / Title	
E-mail	Phone	Fax

3. **Part B Contract**

    a)   4.1 Implementation & 4.2 Contractor Responsibilities

- Delete 4-1 Implementation

- "Delete Text in section 4-2"

- "Substitute text 4-2", "All Part C deliverables are listed in the Part C Exhibits. Exhibit C7 Scope of supply, Section 1.1, provides a list of deliverables.

4. **Part C Exhibit C1 – T0 System Summary**

    a)   2.5 COMMUNICATIONS REQUIREMENTS, A. General requirement, 2.

- "Clarification add text", "The physical network infrastructure to be provided by others according to the proposed SPCS needs. Others shall supply, install and test the physical fiber optics cable on site. In terms of the SPCS equipment, there are no County supplied items in the RFP. All SPCS equipment, including communication switches (CISCO) shall be included in the proposal response to this RFP."

5. **Part C Exhibit C1 – T1 Devices**

    a)   2.2 HARDWARE REQUIREMENTS, A. Field Devices Requirement.

- "Clarification add text to item 8. Field Appurtenances, b)", "Contractor shall provide information on system requirements, system performance and recommended devices."

- "Clarification add text to item 10. Field Power Supplies/Power Conditioners, f)", "Contractor shall provide option for panel mount type recommended devices for 24Vdc power supplies and signal conditioners in Exhibit C7, Table C7-36."

6. **Part C Exhibit C1 – T2 Controllers**

    a)   2.2 HARDWARE REQUIREMENTS, A. SPCS Control Panel, 11.

- "Clarification add text", Should read: "Panels located in the control rooms to be cooled by ambient air only. There are no provisions for forced air ducting. Contractor shall provide the following options for SPCS control panel in Exhibit C7, Table C7-36; a) Fans installed and provided in panels, b). External instrument quality air purging/pressurization systems to allow external air supply."

    b)   2.2 HARDWARE REQUIREMENTS, A. SPCS Control Panel, 12.

- "Clarification add text", "Seismic restraint requirements as required by Washington State codes and regulations for local seismic zone. Contractor shall provide calculations and installation requirements. Use the IBC 2003 code with Washington State 2003 amendments located through the following websites http://www.iccsafe.org/ and *http://www.sbcc.wa.gov/*."

c) 2.2 HARDWARE REQUIREMENTS, A. SPCS Control Panel, 13

- Delete item a) (1) & (2).

- Text substitution for item e), "Terminate all wiring in accordance with UL508A".

d) 2.3 SOFTWARE REQUIREMENTS, A. DSP Processor Performance, 5.

- Text substitution for "The fastest (PID) loop'', "The slowest (PID) loop".

- "Clarification add text'', "The 50 msec scan time happens internal to the processor to execute logic. The Contractor shall provide this information on execution time so that the County staff can obtain an understanding of how the system performs, and further, to establish a means of measurement of the system performance. The Contractor shall assume that each DSP applied to the normalized ACC I/O density shall execute a maximum of 50 PID loops."

- This above clarification is not to be confused with the overall "command to feedback" confirmation time measured between the instant of HMI executed "start", and the instant HMI reports through monitoring field based feedback signal that a motor is "running". This time is less than 2 seconds and less than one second for previously requested graphics, per RFP Exhibit C1: Technical Specifications, Tier 3 - HMI 2.3 Software Requirements, G.SPCS Console Performance, d & e. However, there is a correlation between fast scan time, and fast graphic update time.

e) 2.3 SOFTWARE REQUIREMENTS, C. Process Control Software, 2, d).

- "Clarification add text', "The extent of the batch capability is defined in ISA's SP88. In wastewater we do not need the regulatory audit requirements associated with batch processes, as in the pharmaceutical industry, for example. Sample batch process in wastewater is the polymer system."

7. **Part C Exhibit C1 – T3 HMI**

a) 2.1 GENERAL REQUIREMENTS, C. Service Condition.

- "Add item 4.", "4. All consoles shall be identical tower type. Contractor shall provide option for rack mount type in Exhibit C7, Table C7-36."

b) 2.3 SOFTWARE REQUIREMENTS, A. Operating System, 1.

- "Text substitution remove a) to f)", "For the purpose of the BOM for this RFP use the current standard software. a) OS – MS XP, b) Database MS SQLServer 2005, c)   Historian OSI PI".

8. **Part C Exhibit C1 – T4 EWS**

a) 2.1 GENERAL REQUIREMENTS, C. Service Condition.

- "Add item 4.", "4. All consoles shall be identical tower type. Contractor shall provide option for rack mount type in Exhibit C7, Table C7-36."

b)   2.1 GENERAL REQUIREMENTS, T.

- "Add item 3", "3. The EWS does not provide network programming connections to the legacy DFP. All AB ControlLogix PLC, DFP are not considered legacy. Therefore, EWS networked based programming of these DFP's shall be provided as specified."

c)   2.2 HARDWARE REQUIREMENTS, C. Application Servers, 4, b.

- "Clarification add text", "The Contractor shall provide their standard redundancy and shall provide the County with associated options hardware/software functionality in Exhibit C7, Table C7-36."

d)   2.3 SOFTWARE REQUIREMENTS, A. Operating System, 1.

- "Text substitution remove a) to f)", "For the purpose of the BOM for this RFP use the current standard software. a) OS – MS XP, b) Database MS SQLServer 2005, c)   Historian OSI PI".

e)   2.3 SOFTWARE REQUIREMENTS, D. Process Control Software, 2, e).

- "Clarification add text", "Sequence of Events Logger shall consist of an audit trail with operator settable time stamp starting at a minimum of 100 millisecond intervals."

9.   **Part C Exhibit C1 – T5 Historian**

a)   1.1 DESCRIPTION, A, 2, c) and 2.1 GENERAL REQUIREMENTS, B.

- "Clarification add text", "The SPCS data historian stores only the SPCS historian programming and configuration files."

10.   **Part C Exhibit C1 – T7 Enterprise**

a)   2.1 GENERAL REQUIREMENTS, E.

- "Clarification text substitution remove 1 to 10", "For the purpose of this RFP use the current standard County's enterprise applications are as follows:

  1.   LIMS- Labvantage and OPS 32,
  2.   Historian -OSI PI with RtPM
  3.   MMS – MainSaver,
  4.   MS SQL, Oracle, and Peoplesoft.
  5.   Other Enterprise Application information only
      a.   Future Computerized Maintenance Management System (CMMS)
      b.   Asset performance monitoring
      c.   Asset Management System
      d.   Human resources
      e.   Accounting and finance
      f.   Geographical information system
      g.   Engineering
      h.   Purchasing"

11. **Part C Exhibit C2 – System Drawings and Design References**

   a)   G000002 SPCS RFP Scope of Work Diagram

   - "Clarification", "The RFP required pricing does not include any field devices and wiring. The Contractor shall provide pricing for the panels, I/O cards, hardware and terminals to the point of termination. Any field cables and devices are not included in your proposal."

   b)   G000003 Normalization

   - "Clarification", "The normalized ACC identified 10 AB PLC's, which are not intended to be a peer-to-peer connection. The AB PLC connectivity and connections shall be network based. Follow sizing rules and manufacturer's recommendation so as to stay within specified performance criteria."

   - The 1000 concurrent users at the corporate level are web-based connections to the R-SPCS. The 100 users defined in the Exhibit C7 Section 2.3, C,1, a),. are physical fat client HMI connections to SPCS.

   - The Remote Offsite indicates 84 AB PLC's. For the purpose of the RFP response, no supply of any field components for Offsite facilities is included. Only the communications at the SPCS end inside the plant, and any associated panels, hardware and software required for the SPCS to communicate to the field PLC's, are included in this RFP.

   c)   G000003 Normalization; <u>Question:</u> The RFP does not provide specific information with respect to the expected SPCS processors loading (how much logic will be there). This information is required to determine the number of redundant processors for each normalized ACC.

   - "<u>Answer</u>": This observation is correct. The RFP does not provide specific detail on this item. It is the contractor's responsibility to draw some conclusions from the number of I/O in the normalized ACC, and the need for the required and identified high level of systems automation and unattended operations, and provision of diagnostics information for maintenance and troubleshooting purposes, given the stated performance criteria of the SPCS. The role of the SPCS supervisory controller is to:

      i.   Process high level supervisory logic for the given ACC·

      ii.   Coordinate plant wide process control with other supervisory processors such as to link all ACC's into SPCS·

      iii. Provide information required for coordination with other supervisory processors for R-SCPS control·

      iv.   Provide information to enterprise data historian·

      v.   Provide information to HMI System and EWS system

   - How is the County defining "high level of system automation"? Equipment (motors, valves, circuit breakers, etc.) start, stop, open, close, modulate, automatically, in response to variety of closed-loop process conditions, according to programmed control logic which takes into account immediate local process conditions as well as general process conditions associated with the operation of the plant as a whole. Future automation which must be supported will include Offsite (Conveyance) inflow to the primary plants, thus expanding the realm of automation control and systems balancing (i.e. system-managed response to storm events).

- The automatic supervisory logic shall link all "machine based" regulatory logic, and will make appropriate (programmed) decisions as to the next control action on a large system basis. All within the prescribed performance requirements.

- Intended control modes:

  i. Digital:
     1. SPCS Manual (operator issues control commands via HMI screens)
     2. SPCS Auto (control logic issues control commands as per programmed logic and scenarios)
  ii. Modulating:
     1. SPCS Manual (operator enters exact control output value, and this value does not change, it is maintained by the SPCS)
     2. SPCS Auto (operator enters desired setpoint, and the control logic maintains this set point by varying control output value, automatically)
     3. SPCS Cascade (the control logic changes value of a loop set point as a function of other process parameters usually within the same loop, or adjacent loop, (almost always within the same process area.)
     4. SPCS Super-Cascade (the control logic changes value of a loop or several loops set points as a function of other systems performance, predictions, modeling, usually originating outside of the process area, (i.e. regionally, etc.)

- All of the above shall influence the amount of program logic that will need to be stored and executed in the SPCS processors.

- The contractor shall:

  i. use this above information,

  ii. use the I/O loading as described in the normalized ACC,

  iii. use the system performance requirements,

  iv. use the proposed system capabilities (speed, memory, programming blocks, routines, macros, etc.),

  v. develop sizing calculations that shall enable the Contractor to communicate to the County, the appropriate size and numbers of normalized ACC SPCS controllers to handle the expected logic processing load.

- The Contractor's response shall include assumptions, and sizing calculations. This information will be used during proposal evaluation to determine if adequate care has been taken by the Contractor in sizing the controllers – their processing power, and their quantity.

- For simple reference, irrespective of hardwired or digital communication bus based control, the contractors shall use the following information:

  i. Typical motor control will have up to 3 digital outputs and 6 digital inputs.

  ii. Typical speed controlled drive will have up to 3 digital outputs and 6 digital inputs, 1 analog output and 1 analog input.

  iii. Typical small fully automated system will have 5 motors, 3 adjustable speed drives, 15 digital instruments (10 inputs, 5 outputs), 8 analog instruments (5 inputs, 3 outputs).

   iv. Typical medium size fully automated system shall be based on 3 small fully automated systems; one medium system equals three small systems in terms of I/O loading and required logic.

   v. Normalized ACC shall have approximately 10 small fully automated systems, and approximately 10 medium size fully automated systems, up to the limit of I/O included in the normalized ACC. Note this number of small and medium fully automated systems making up the ACC is approximate, to indicate the amount and complexity of the required logic. All small and medium automation systems must work in conjunction with one another, in a fully automatic manner. Logic for all these systems, and their programmed coordination shall reside in the SPCS controllers in each ACC.

   vi. In addition, there are also all of the PLC connections to the SPCS, Allen-Bradley and legacy (TI and Forney). Each of these connections shall represent the equivalent of five (5) small fully automatic systems, for the purpose of I/O loading and required logic amount and complexity.

d) G000003 Normalization;

- Question: How many HART-based I/O points (analog input and output) are required per normalized ACC? "Answer": 30 instruments considered AI, 10 instruments considered AO.

- Question: How many Foundation Fieldbus drops are in a normalized ACC? "Answer": 100 instruments (drops) considered AI, 40 instruments (drops) considered AO.

- Question: How many ProfiBus drops are in a normalized ACC? "Answer": 100 instruments (drops) considered AI, 40 instruments (drops) considered AO.

12. **Part C Exhibit C5 – Contractor Qualifications and Project References**

a) 1.2 QUALIFICATION CRITERIA – MANDATORY EXPERIENCE.

- "Clarification add text", "The mandatory requirements with a minimum installed system of 10,000 I/O points are real hardwired I/O. Attributes of an I/O point do not count towards the 10,000 limit. Modbus, Foundation Fieldbus, DeviceNet, or Profibus devices are considered part of the I/O count, however, one connection point (node) is considered one I/O for the purpose of this RFP mandatory requirement."

13. **Part C Exhibit C7 – Scope of Supply**

a) 1.1 DESCRIPTION, D, 5, a).

- "Clarification add text", "Provide a detailed list of manuals, tables, documents, drawings, and files that shall be supplied for phase 1. Provide a similar list that summary the deliverables for phase 2. Phase 1 submittals shall include a summary consisting of one or two pages of the appropriate documents and manuals for the County to evaluate during the proposal. Other specific requirements shall be provides as identified in each of the Section 3, Products and Submittals within this RFP."

b) 2.4 EXHIBIT C1, SYSTEM SPECIFICATIONS, TIER 4, F, 1. and 2.

- "Clarification add text", "Printers: Hewlett Packard Laser Black and White (HP LaserJet 8150dn) and Color (HP LaserJet 5550dn); Network: Switches Cisco 3750,security (Cisco ASA 5500), routers (Cisco 3800) or current model."

c) **2.8 TESTING GENERAL SCOPE REQUIREMENTS, A. Testing General Requirements,** 1,

- "Clarification add item", "i)The scope of programming requirements is outlined in Exhibit C7. Contractors are not asked to program the process control of each area control center. Rather, evaluation-level programming shall be provided by the contractors utilizing the proposed system. This level of programming must be comprehensive enough to enable County evaluation of the system, and to enable the contractor to perform the required tests during the evaluation, FAT, and SAT that covers all seven tiers. The contractor shall perform the programming as deemed necessary to prove that the system works in accordance with the specified requirements and performance. This programming is not to be confused with process control programming to operate the wastewater treatment plants – this type of programming is not in the RFP scope."

- "Clarification add item", "j) Process modeling (as in process systems simulation and modeling) is not required for the testing, but demonstration of appropriate logic, logic simulation and software tie backs through appropriate system simulator is required."

END OF RFP 05-085KAH ADDENDUM #1

PRE-PROPOSAL CONFERENCE

Pre-proposal conference was held on May 17th, 2006 at King County – Exchange Building 3rd Floor Conference Room, between 1pm and 4pm.

List of attendees is attached to the Addendum #1.

For the RFP Proposals preparation by contractors, only the text of Addendum #1 above is contractually binding.

Following is a brief summary of the discussion for record, and the benefit of staff and contractors that did not attend the conference.

PURPOSE

The purpose of the pre-proposal meeting was to review the Supervisory Process Control System (SPCS) RFP referenced as "RFP 05-085 KAH" with the Contractors, explain the RFP intent to them, and answer their questions.

Questions that could not be answered by King County and their consulting team during the pre-proposal conference were recorded, and are answered in writing in The Addendum #1 above.

DISCUSSION

The following is a summary of the discussions made during the pre-proposal conference.

1.   Part A - Request for Proposals was reviewed for the Contractors the following was identified:

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg 4, 1.3	Proposal signatures are required	Info	Info
2	Pg 5, 1.6	Schedule was reviewed	Info	Info
3	Pg 5, 1.6	Proposal due date extension was requested.	As documented in the addendum	Addendum
4	Pg. 6-8, 1.13 C.	A review of this section, required review of Part B Terms and Conditions, was performed and highlighted for the contractors.	Info	Info
5	Pg. 8, 1.14	It was indicated that Part C Technical Specifications provides a detailed list of deliverables. This section is intended as a guideline. All Part C deliverables are listed in the Part C Exhibits. Exhibit C7 Scope of supply, Section 1.1, provides a list of deliverables.	Info	Info
6	Pg. 8, 1.14 B.	The question was asked if all proposals are to be in separate sealed envelopes.	As documented in the addendum	Addendum

No	Reference	Issue/Question/Description	Answer given	Action
7	General	Contractor requested the KC life cycle cost equation.	Contractors are requested to provide only the direct costs of purchasing and supporting the SPCS/R-SPCS. O&M direct and indirect lifecycle costs will be applied using a County standard analysis model, consistent across the proposals.	Info
8	General	Has general contractor for installations been selected?	No general contractor is selected at this time.	Info
9	General	Demonstration is required for items that are included in the proposal. Contractor to state system short falls, exceptions, additions, and advantages. Phase 2 evaluation is very important, and it carries 70% of the overall combined scoring.	Info (RFP Phase 2 functional verification test will be required only of a short-list of Contractors)	Info
10	General	What is to be supplied with this RFP? Entire system from design to construction/startup? Or just parts and services to support the control system design by others?	This is not a turnkey system RFP, inclusive of installation, programming, commissioning, startup etc. This RFP is a systems supply request to provide hardware, software, and communications equipment necessary to meet the requirements of the plant wide SPCS and the overall regional SPCS. In addition to the system components, the RFP states a requirement for services which is intended to establish a pricing structure for both training and system-expert programming that can be used during system implementation, as determined by the County at any time. No process control programming for the control system supply is explicitly defined in this RFP. System programming for process control shall be performed by a team that will be assembled by the County, and may include the SPCS supplier expert staff.	Info

No	Reference	Issue/Question/Description	Answer given	Action
11	General	Is the Contractor material such as rates and staff information protected under a non-disclosure agreement (NDA)?	Non-disclosure information is provided in Section 2.11. The County will keep the Contractor information provided confidential during the course of the RFP process.	Info

2.   Part B - Request for Proposals was reviewed for the Contractors the following was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg 23, 4-1	If the County creates interface programs, is the Contractor liable for integration, performance and support?	As documented in the addendum.	Addendum

3.   Part C – Technical Specifications was reviewed for the Contractors the following general questions was identified:

No	Reference	Issue/Question/Description	Answer given	Action
1	General	Please clarify the extent of programming or engineering effort required by the RFP.	As part of the RFP the Contractor shall provide pricing for engineering support for system Integration that is considered optional by the County, and which may be requested as a part of the system engineering through development and commissioning.	Info
2	General	What is King County standards operating system?	As documented in the addendum.	Addendum
3	General	Question was asked about the Brightwater WWTP, and how it fits in the RFP for SPCS.	Brightwater is part of the R-SPCS and thus will have common SPCS elements and implementation with other County facilities. Refer to Exhibit C T0, which defines the R-SPCS. Brightwater is part of WTD control system standards development, and the R-SPCS, and shall be treated in the context described in the RFP documents. No additional information about the BW contract and progress is necessary to allow the contractors to propose as per the RFP requirements.	Info

No	Reference	Issue/Question/Description	Answer given	Action
4	General	A question was asked during the meeting: How many here today have an engineering background and how many have a system integration background?	The attending Contractors that attended have a background of approximately 70% Engineers and 30% System Integration.	Info

4. Part C – Exhibit C1 – T0 System was reviewed for the Contractors the following general questions was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg. 5, 1.3, H	Does the County have an existing timeserver?	The County does not currently have secure connection to NIST or similar timeserver. Contractor shall insure functionality within the proposed system as described.	Info
2	Pg 17, 2.5, A, 2.	Question was asked about communication network infrastructure, and what is requested in the RFP as supplied by Contractor.	As documented in the addendum	Addendum

5. Part C – Exhibit C1 – T1 Devices was reviewed for the Contractors no questions were identified.

6. Part C – Exhibit C1 – T2 Controllers was reviewed for the Contractors the following general questions was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg. 16, 2.3, 5	Question was asked about the intent for the 50ms scan time vs. system response time under 2 seconds.	As documented in the addendum	Addendum
2	Pg. 4, 2.2, 5	Shall panels be UL approved?	All panels need to be UL508A certified and shall bear the official UL seal of approval.	Info
3	Pg. 17, 2.3, C, 2, d).	What is meant by the terms "batch" and "recipe" based control – as these terms carry special meaning in some process industry (i.e. pharmaceutical)	The extent of the batch capability is defined in ISA's SP88. In wastewater we do not need the regulatory audit requirements. Sample batch process is the polymer system.	Info
4	General	Discussion concerning proposing system based upon the normalized ACC model; the intent is not to size for performance in this niche, but to address the system whole with respect to SPCS and Regional requirements.	The Contractor is experienced with their product. This experience shall be used to size the processors with the normalized ACC for the required performance requirements.	Info

No	Reference	Issue/Question/Description	Answer given	Action
5	Pg. 5, 2.2, 13,a, 2	Can we obtain County standards as referenced?	As documented in the addendum.	Addendum
6	Pg. 5, 2.2, 13, e)	Can we obtain County standards as referenced?	As documented in the addendum.	Addendum
7	Pg. 5, 2.2, 12	What are the WA state seismic codes?	As documented in the addendum.	Addendum
8	Pg. 4, 2.2, 11	Are the (optional) panels to be air-conditioned?	As documented in the addendum.	Addendum

7.   Part C – Exhibit C1 – T3 HMI was reviewed for the Contractors the following general questions were identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg. 2, 2.1, H, 2	Are all consoles to be identical (HMI, EWS, etc.)?	As documented in the addendum	Addendum
2	Pg. 5, 2.3, A, 1, d)	Are we to provide CAD software on our HMI consoles?	As documented in the addendum	Addendum
3	Pg. 5, 2.3, A	Please define the County software standards in each of these areas.	As documented in the addendum.	Addendum

8.   Part C – Exhibit C1 – T4 EWS was reviewed for the Contractors the following general questions were identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg. 7, 2.2, C, 4, b	Does the County require cluster mirrored servers?	As documented in the addendum.	Addendum
2	Pg. 5, 2.1, T	Does the legacy existing field controllers need to be programmable by the EWS?	As documented in the addendum.	Addendum
3	Pg. 13, 2.3, D, 2, e	Can you define sequence of events logger?	As documented in the addendum.	Addendum

9.   Part C – Exhibit C1 – T5 Historian was reviewed for the Contractors the following general question was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg 1, 1.1, A, c) Pg 2, 2.1, B.	Please clarify opposing statements regarding the role, programming & configuration of the SPCS data historian.	As documented in the addendum.	Addendum

10. Part C – Exhibit C1 – T6 IS was reviewed for the Contractors the following general questions was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	General	Info	We encourage all options that will add additional functionality to the SPCS and the R-SPCS. One example is a CMMS, this shall be proposed as an optional solution in Exhibit C7, Table C7-36.	Info

11. Part C – Exhibit C1 – T7 Enterprise was reviewed for the Contractors the following general questions was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg. 3, 2.1, E	Please detail the County standard enterprise applications.	As documented in the addendum.	Addendum

12. Part C – Exhibit C2 – Drawings was reviewed for the Contractors the following general questions were identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	G000003	What all is to be supplied by the Contractor? (i.e. field devices?)	As documented in the addendum.	Addendum
2	G000003	Is connectivity to Allen-Bradley PLCs to be peer-to-peer?	As documented in the addendum.	Addendum
3	G000003	In the normalized model, concurrent users at the enterprise level number 10x100 = 1000 users – please clarify.	As documented in the addendum.	Addendum
4	G000002	Are field devices and wiring included in this RFP?	The RFP required pricing does not include any field devices and field wiring. Contractor shall provide pricing for the panels, I/O cards, panel internal wiring, hardware and terminals to the point of termination. Any field cables and devices are not included in your proposal.	Info
5	General G000003	Request for clarification: The RFP does not provide specific information with the expected SPCS processors loading (how much logic will be there). This information is required to determine the number of redundant processors for each normalized ACC.	As documented in the addendum	Addendum

13. Part C – Exhibit C3 – System Security was reviewed for the Contractors no questions or comments were identified.

14. Part C – Exhibit C4 – System FVT was reviewed for the Contractors the following general questions were identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	General	Where will the functional verification test (FVT) be held?	FVT shall be performed at the South Plant in Renton. Logistic will be addressed at the beginning of Phase 2 of Proposals Evaluation with the short listed contractors.	Info

15. Part C – Exhibit C5 – Contractor Qualifications and Project Reference was reviewed for the Contractors the following general questions were identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	Pg. 1, 1.2	Please define "real I/O."	As documented in the addendum.	Addendum

16. Part C – Exhibit C6 – Contractor Compliance was reviewed for the Contractors the following general questions were identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	General	Info	A compliance table has been provided electronically; refer to Exhibit C6 – Contractor Compliance for the electronic form.	Info

17. Part C – Exhibit C7 – Scope of Supply was reviewed for the Contractors the following general questions was identified.

No	Reference	Issue/Question/Description	Answer given	Action
1	General	Contractors are encouraged to include optional items that will enhance the SPCS and R-SPCS in Exhibit C7, Table C7-36 and Table C7-37.	Info	Info
2	Pg. 19, 2.8	What us the scope of programming requirements for this RFP?	As documented in the Addendum.	Addendum
3	Pg. 19, 2.8	Do the Contractors need to provide an operational simulation model?	As documented in the addendum: Process modeling (as in process systems simulation and modeling) is not required for the testing, but appropriate logic, logic simulation and software tie backs through appropriate system simulator is required.	Addendum

No	Reference	Issue/Question/Description	Answer given	Action
4	General	Is system training (as a service) a requirement of the RFP?	Training is requirement and defined in the RFP. Refer to Exhibit C7 section 2.10 & C8 for tables of services.	Info
5	General	Will a separate RFP be issued for system integration services?	County will evaluate the requirements after the award of the SPCS RFP, and will make decisions at that point as to the most suitable method for obtaining needed programming resources in support of process control automation.	Info
6	Pg. 15, 2.4, F.	What are the County standard operating systems, printers and network switches?	As documented in the addendum.	Addendum
7	General	How much detail is required in the BOM to be filled in by the Contractors?	Contractor shall identify major items in the BOM, and shall provide as much details as required for (a) proposed system accurate evaluation and (b) efficient and accurate signing of the contract. It is not expected that each and every bolt of a panel will be identified in the BOM. It is expected that no major cost item shall be missed. It is expected that the BOM shall offer clarity information with the proposed parts revision or release, so that changes, adds/deletes etc. are simple to administer.	Info
8	General	Will there be separate instrumentation RFP?	This question is not relevant to the current RFP. Nothing in this SPCS RFP is linked to some other scope of supply at another WTD facility.	Info
9	General	Will there be separate RFP for Brightwater?	This question is not relevant to the current RFP. Nothing in this SPCS RFP is linked to some other scope of supply at another WTD facility.	Info

18.   Part C – Exhibit C8 – Cost Proposal was reviewed for the Contractors no question was identified.

END OF RFP 05-085 KAH, MAY 17, 2006 PRE-PROPOSAL CONFERENCE SUMMARY